

COMBINED TITLES IV & V PERMIT TO OPERATE

PG&E MORRO BAY POWER PLANT

STAFF REPORT
APPLICATION NUMBERS 2055 and 2103

February 9, 1998

I. Background

The federal Clean Air Act Amendments of 1990 established a nation-wide permit to operate program commonly known as "Title V". This District adopted Rule 216, Federal Part 70 Permits, to implement that program locally and received interim program approval for two years from EPA in December 1995. That interim approval has since been extended until October 1, 1998. Pacific Gas and Electric (PG&E) Company applied for a Title V permit to operate the Morro Bay power plant in May 1996 under the District's program (application #2103). The Clean Air Act amendments also initiated a second federal permit system just for power plants which is commonly known as the "Acid Rain program". This District adopted Rule 217, Federal Part 72 Permits, to implement that program and PG&E submitted their Acid Rain application in December 1995 (application #2055). This engineering evaluation is intended to assess the adequacy of those applications and to explain the District's approach in composing the proposed combined Title V and Acid Rain permit for the PG&E Morro Bay power plant.

PG&E's Title V application was received on May 30, 1996, which met the Part 70 application deadline of June 1, 1996. Their Acid Rain application was received on December 4, 1995, which also met the application deadline for that program of December 31, 1995. Completeness evaluations were performed, see Attachment A, and both applications were deemed complete upon receipt in the District's letters to PG&E dated June 19, 1996, and December 22, 1995, respectively.

The District's approach to the Acid Rain and Title V programs is to issue a single permit for the entire facility which satisfies the federal requirement for a permit under Rule 216, Rule 217, and the District's requirement for a permit under Rule 202, Permits. All federal, state, and District requirements associated with the emission of air contaminants are intended to be included in that permit. All documents, which are not readily available to the public and are necessary to support the permit, are to be included. The District has taken the approach that all of the following documents are readily available to the public and, therefore, will not be included: Code of Federal Regulations, California Code of Regulations and Health and Safety Code, District Rules

and Regulations (both those which are current and those which appear in the California State Implementation Plan), the continuous emission monitoring system quality assurance and monitoring plans (available at the Morro Bay Power Plant and at the District's office), and all test methods.

The Acid Rain portion of this permit was required by 40CFR72.73.b.1.i to be issued no later than December 31, 1997. The proposed permit here was not ready to be issued by that date.

Consequently, a separate Acid Rain permit was issued on December 22, 1997, in advance of this

combined permit. With the issuance of this permit, that earlier Acid Rain permit is superseded.

This evaluation will repeat the earlier determination of compliance for all applicable Acid Rain requirements so that all pertinent facts can be found in this single document.

EPA was sent a draft of the proposed permit on September 26, 1997, and no comments were received. They were then sent a proposed permit on October 29 and, again, no comments were received. A revised proposal, which reflected the permit as it is to be issued now, was sent to EPA and received by them on December 12. In a telephone conversation with Mr. Matt Haber of Region IX on December 11, the District learned that EPA had not reviewed the draft and did not intend to review the proposed permits because of workload constraints. Indeed, their 45-day review period expired on January 26, 1998, without any objection or comment having been received.

PG&E was also sent copies of the draft and proposed permits on the above mentioned dates. Comment letters were received from them on November 25 and December 19, 1997. The District's response to PG&E's first letter were sent on December 11 and no response is judged necessary to the second letter because all comments were agreed to.

A 30-day public comment period was noticed in the newspaper beginning on October 29, 1997.

A single comment was received, see attachment G and eval section VI.13, but was judged to be of insufficient reason to withhold this permit.

II. Compliance with Rule 216: A section-by-section evaluation of compliance for appl 2103

with all pertinent requirements of this rule follows. Title V requirements only are listed by

rule section and are shown in normal text. This evaluation's comments are shown in bold text.

B. Applicability. PG&E is subject to the requirement to obtain a Title V permit

because their actual emissions exceed the major sources thresholds: 100 tons per

year of a criteria air pollutant: NOx, SO2, and CO. The facility is also subject to

the Acid Rain program as a listed power plant in 40CFR73.

E. Requirements - Application Contents

1. Required Information for a Part 70 Permit. A complete application for a Part 70

permit shall contain all the information necessary for the APCO to determine

compliance with all applicable requirements. The information shall, to the extent

possible, be submitted on standard application forms available from the District.

The application contained all of the listed information and was deemed complete upon receipt, see Attachment A to this evaluation. The

District's

standard forms were used.

5. Certification by Responsible Official. Any Part 70 permit application shall be

certified by a responsible official. The certification shall state that, based on

information and belief formed after reasonable inquiry, the statements and

information in the document are true, accurate, and complete. The application

was certified to be true, accurate, and correct by James K. Randolph who was

PG&E's responsible official at the time of submittal.

F. Requirements - Permit Content

1. Each Part 70 permit shall include the following elements:
 - a. Conditions that will assure compliance with all applicable requirements, including conditions establishing emission limitations and standards for all applicable requirements. All applicable requirements are included in the proposed permit. Where any two or more applicable requirements are mutually exclusive, the more stringent shall be incorporated as a condition and the other(s) shall be referenced. Several applicable requirements were streamlined, see below, and referenced in the permit.
 - b. The term of the Part 70 permit. See condition III.A.8.
 - c. Conditions establishing all applicable emissions monitoring and analysis procedures (see condition III.C), emissions test methods or continuous monitoring equipment required under all applicable requirements (see condition III.D.4); and related recordkeeping and reporting requirements (see condition section III.B).
 - 2) All applicable records shall be maintained for a period of at least 5 years. See condition III.B.
 - 3) All applicable reports shall be submitted every 6 months and shall be certified by a responsible official. See condition III.B.5.c.
 - i. All instances of deviations from permit requirements must be clearly identified. See condition III.B.5.c.1.
 - e. A severability clause to ensure the continued validity of the various Part 70 permit requirements in the event of a challenge to any portions of the Part 70 permit. See condition III.A.6.
 - f. A statement that the permittee must comply with all conditions of the Part 70 permit. See condition III.A.2.a.
 - g. A statement that the need for a permittee to halt or reduce activity shall not be a defense in an enforcement action. See condition III.A.2.b.
 - h. A statement that the Part 70 permit may be modified, revoked, reopened, and reissued, or terminated for cause. See condition III.A.2.c.
 - i. A statement that the Part 70 permit does not convey any property rights of any sort, or any exclusive privilege. See condition III.A.2.d.
 - j. A statement that the permittee shall furnish (information) to the permitting authority.... See condition III.A.2.e.
 - k. A condition requiring the permittee pay fees due to the District consistent with all applicable fee schedules. See condition III.A.9.
 - l. Applicable conditions for all reasonably anticipated operating scenarios

identified by the source in its Part 70 permit application. PG&E did not

request alternative operating scenarios in their application.

m. Applicable conditions for allowing trading under a voluntary emission cap

accepted by the permittee to the extent that the applicable requirements provide for such trading without a case-by-case approval of each emissions trade.

PG&E did not request an emission cap in their application.

n. Prompt reporting of deviations from permit requirements, including those

attributable to upset conditions as defined in the permit, the probable cause of

such deviations, and the corrective actions or preventive measures taken. See

conditions III.A.3 and III.B.4.e.

o. For any condition based on a federally-enforceable requirement, references that

specify the origin and authority for each condition, and identify any difference

in form as compared to such federally-enforceable requirement. See convention A.2.

2. Each Part 70 permit shall include the following compliance requirements:

a. A statement that representatives of the District shall be allowed access to the

stationary source and all required records. See condition III.A.5.

b. A schedule of compliance consistent with Subsection L.2. See condition

section III.F.

d. A requirement that the permittee submit compliance certification pursuant to

Subsection L.3. See condition III.B.5.d.1.

3. Federally-enforceable requirements. All conditions of the Part 70 permit shall be

enforceable by the EPA and citizens under the CAA unless the conditions are

specifically designated as not being federally-enforceable and, therefore, a District-only requirement. See condition III.A.2.i.

G. Requirements - Operational Flexibility

2. Alternative Operating Scenarios. The owner or operator of any stationary source

required to obtain a Part 70 permit may submit a description of all reasonably

anticipated operating scenarios for the stationary source as part of the Part 70

permit application. PG&E did not request alternative operating scenarios in

their application.

H. Requirements - Timeframes For Applications, Review, And Reissuance

1. Significant Part 70 Permit Actions

a. Timely Submission of Applications. Any stationary source required to obtain

a Part 70 permit pursuant to Section B shall submit an application for such

permit in the following manner:

1) For any stationary source that is required to obtain a Part 70 permit pursuant to Section B on the effective date of this rule, an application for a Part 70 permit shall be submitted to the District no later than six (6) months after the effective date of this rule. A complete application was received on May 30, 1996, which was prior to the deadline of June 1, 1996.

b. Completeness Determinations. The APCO shall provide written notice to an applicant regarding whether or not a Part 70 permit application is complete.

PG&E was notified on June 19, 1996, that their application was complete.

c. Action on Applications. The APCO shall take final action on each complete

Part 70 permit application as follows:

1) For applications for a Part 70 permit that are submitted pursuant to

Subsection H.1.a.1 the APCO shall take final action:

i. On at least one third of all such applications by no later than one year

after the effective date of this rule; Three applications were filed

and PG&E's will be the first to be issued. This should occur approximately 26 months after Rule 216's effective date of December 1, 1995.

I. Requirements - Permit Term and Permit Reissuance

1. All Part 70 permits shall be issued for a fixed term of 5 years from the date of

issuance of the permit by the District. See condition III.A.8.

J. Requirements - Notification

1. Public Notification

a. The APCO shall publish a notice, as specified in Subsection J.1.b, of any

preliminary decision to grant a Part 70 permit, if such granting would

constitute a significant Part 70 permit action. Done

b. Any notice of a preliminary decision required to be published pursuant to

Subsection J.1.a shall:

1) Be published in at least one (1) newspaper of general circulation in San

Luis Obispo County, by no later than ten (10) calendar days after such

preliminary decision. Notice published on October 31, 1997, in the

Telegram Tribune which is a newspaper of general circulation in the

District.

2) Be provided to all persons on the Part 70 permit action notification list.

This list shall include any persons that request to be on such list. No one

has requested to be included on a Part 70 notification list.

3) Include the following:

- i. Information that identifies the source, and the name and address of the source.
- ii. A brief description of the activity or activities involved in the Part 70 permit action.
- iii. A brief description of any change in emissions involved in any significant Part 70 permit modification. See Attachment F for text of public notice.

4) Include the location where the public may inspect the information required to be made available pursuant to Subsection J.1.c. see Attachment F

5) Provide at least 30 calendar days from the date of publication for the public to submit written comments regarding such preliminary decision. see Attachment F

6) Provide a brief description of comment procedures including procedures by which the public may request a public hearing, if a hearing has not been scheduled. The APCO shall provide notice of any public hearing scheduled pursuant to this subsection at least 30 calendar days prior to such hearing. see Attachment F

c. The APCO shall, by no later than the date of publication, make available for public inspection at the District office the information submitted by the applicant and the APCO's supporting analysis for any preliminary decision subject to the notification requirements of Subsection J.1.a. Done

d. The APCO shall maintain records of the those who comment and issues raised during the public participation process. See attachment G and item VI.13 of this evaluation.

e. The APCO shall only consider comments regarding a preliminary decision to grant a Part 70 permit if the comments are germane to the applicable requirements implicated by the permit action in question. Comments will only be germane if they address whether the permit action in question is consistent with applicable requirements, requirements of this rule, or requirements of 40 CFR Part 70. In addition, comments that address a portion of a Part 70 permit that would not be affected by the permit action in question would not be germane. See item VI.13, the sole public comment received was judged not

to present a sufficient reason to withhold this permit from PG&E.

K. Requirements - Reopening of Permits

1. Reopening of Part 70 Permits for Cause. Each issued Part 70 permit shall include

provisions specifying the conditions under which the permit will be reopened prior

to the expiration of the permit. See condition III.A.2.c.

L. Requirements - Compliance Provisions

1. Permit Required and Application Shield. No stationary source required to obtain a

Part 70 permit shall operate after the date it is required to submit a timely and

complete permit application except in compliance with its Part 70 permit or under

one of the following conditions:

a. When a timely and complete Part 70 permit application has been submitted, the

stationary source may continue to operate until the Part 70 permit is either

issued or denied. This provision does not allow the stationary source to

operate in violation of any applicable requirement. A complete and timely

application for the initial Title V permit was submitted on May 30, 1996.

2. Compliance Plans. A compliance plan must be submitted with any Part 70 permit

application. The compliance plan shall contain all of the following information:

See application section 5.0.

a. A description of the compliance status of the source with respect to all

federally-enforceable requirements.

b. For federally-enforceable requirements with which the source complies, the

plan must state that the source will continue to comply.

c. For federally-enforceable requirements that will become effective during the

Part 70 permit term, the plan must state that the source will comply with such

requirements in a timely manner.

1) A detailed schedule shall be included for compliance with any federally-enforceable requirement that includes a series of actions.

3. Compliance Certification. All permittees and applicants must submit certification

of compliance with all applicable requirements and all Part 70 permit conditions. A

compliance certification shall be submitted with any Part 70 permit application and

annually, on the anniversary date of the Part 70 permit, or on a more frequent

schedule if required by an applicable requirement or permit condition. The

application contained a compliance certification and the annual requirement

appears in condition III.B.5.d.1.

4. Document Certification. Any Part 70 permit application and any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The application contained a document certification and the on-going requirements appear in conditions III.B.5.b.2,c,&d.1.

6. Permit Shield

a. Compliance with all of the conditions of a Part 70 permit shall be deemed compliance with any applicable requirements as of the date of issuance of the Part 70 permit, provided that the Part 70 permit application specifically requests such protection and one of the following conditions is satisfied:

1) Such applicable requirements are included and specifically identified in the Part 70 permit, See condition section III.G.

H. REQUIREMENTS - Timeframes For Applications, Review, And Reissuance

5. EPA Objection. The APCO shall not issue a Part 70 permit if the EPA objects to

the issuance of the Part 70 permit in writing within 45 calendar days of receipt by

EPA of a copy of a complete application for a significant Part 70 permit action or

minor Part 70 permit modification, the proposed Part 70 permit and all necessary

supporting information or until EPA has notified the District that EPA will not

object to such permit action, whichever occurs first. The most recent version of

the proposed combined permit to operate was sent to EPA and received by them on December 12, 1997. Through a telephone conversation with Mr.

Matt

Haber of EPA Region IX on December 11, it was learned that, due to workload constraints, EPA did not intend to review that proposed permit.

Indeed, the 45-day objection period expired on January 26, 1998, without any

notification, one way or the other, having been received from EPA. Consequently, this evaluation considers the opportunity for EPA

objection to

have been satisfied and compliance with District Rule 216.H.5 to have been

shown.

III. Compliance with Rule 217, Acid Rain Requirements. District Rule 217, Federal Part 72

Permits, is fairly straight forward and simply adopts 40CFR72 by reference. The following

paraphrased excerpts from Part 72 are included to here to show that application number 2055 and the proposed permit are in compliance.

72.6.a.2 - any unit listed in Table 2 of 73.10 is subject to Part 72: all four of Morro Bay's units are listed in that table and, therefore, are subject to this regulation.

72.9.a.1 - submit an acid rain permit application no later 12-31-95: PG&E's application 2055 was received on 12-4-95.

72.9.a.2 - operate in compliance with the application and hold an acid rain permit: see condition section V to the proposed permit.

72.9.b - comply with the monitoring requirements of part 75: see condition section III.C to the proposed permit.

72.9.c.1 - hold SO2 allowances and comply with the Acid Rain emission limitations no later than 1-1-2000 (date established by 72.9.c.3.iii): see condition III.F.2.

72.50.a - Acid Rain permit contents:

1 - all elements required for a complete Acid Rain permit application: Section V to the proposed permit contains the Acid Rain permit application in its entirety.

2 - the applicable Acid Rain emissions limitation for sulfur dioxide: Section IV to the proposed permit contains the sulfur dioxide allowances as they are listed in 40CFR73.

72.72.b.1.iii - The state permitting authority shall submit a copy of the draft Acid Rain permit and statement of basis to the administrator: An engineering evaluation and draft permit were submitted to EPA for their review on October 30. No comments were received.

72.72b.1.iv - Public notice of the issuance or denial of the draft Acid Rain permit and the opportunity to comment and request a public hearing shall be given by publication in a newspaper of general circulation: A 30 day public notice was published on October 29 in the Telegram Tribune, a newspaper of general circulation in the county.

IV. Streamlining of Applicable Requirements: The following federally-enforceable limits are subsumed as indicated. This streamlining of requirements is intended to follow the guidance

provided in section II.A, of EPA's White Paper Two, dated March 5, 1996. The subsumed requirements appear in the Permit Shield section of the proposed permit. Through this streamlining action, applicable requirements which were previously District-only requirements become federally-enforceable if any subsumed requirement is federally-enforceable.

Streamlining selects the most stringent emission limitation or work practice standard. The respective recordkeeping, reporting, and monitoring (RRM) requirements associated with that limitation or standard are presumed to be adequate to show compliance. This procedure is in accordance with section II.A.2.e of White Paper Two. In the spirit of that guidance, it is not the intent of this evaluation to "cherry-pick" among the RRM requirements to apply the most stringent RRM among the subsumed requirements.

1. Continuous Emissions Monitoring.

a. Systems to monitor for NO_x are considered a work practice requirement and are required under 40CFR75.10.a.2 as part of the Acid Rain Program, SIP Rule 113.II.A.1, and District Rule 113.B.1.a. The SIP Rule 113 and District Rule 113 monitoring requirements are identical. The 40CFR75 RRM requirements are by far the most extensive and specific of the three regulations so the requirements of 40CFR75 will be used in this permit and those of SIP Rule 113 and District Rule 113 will be subsumed.

The NO_x CEM requirement of District Rule 429 will be applied as District-only. This aspect of Rule 429 was intended to implement the 40CFR75 CEM requirement so it is virtually identical. NO_x CEMs under Rule 429 will not be streamlined with 40CFR75, however, so that this portion of Rule 429 can remain District-only enforceable as the applicant has requested. The operation and maintenance aspects of Rule 429 simply make reference to the 40CFR75 requirements so they have not been included in the proposed permit because they are judged redundant.

Note that the conflicts between 40CFR75 and Rule 429 which are discussed on page 1-2 of PG&E's Quality Assurance plan should be resolved by this streamlining action. The procedures of 40CFR75 take precedence and the conflicting Rule 429 requirements are not included in the permit.

b. CO2 emission monitoring is also considered a work practice requirement and appears in

40CFR75.10.a.3.i, SIP Rule 113.II.A.2, and District Rule 113.B.1.b. The SIP Rule 113

and District Rule 113 monitoring requirements are identical, again. The 40CFR75

RRM requirements are by far the most extensive and specific of the three regulations so

the 40CFR75 requirements will be used in this permit and those of SIP Rule 113 and

District Rule 113 will be subsumed.

2. The duplicative NOx limits of Rule 429 and SIP Rule 405.A.1, and CO emission limits of

Rule 429 and SIP Rule 406.A, are not streamlined here because PG&E has made it known

outside of this permit action that they do not want the more restrictive Rule 429 limits to be

considered federally-enforceable. Note that the CO monitoring requirements of Rule 429

could not be made federally-enforceable to ensure compliance with the federally-enforceable

SIP limit of 2,000 ppm because the upper range of those instruments is only 1,500 ppm. The

alternative compliance method will be to rely on a required annual stack test.

3. The condition III.A.1.c particulate matter limit of 0.3 gr/scf is corrected to 3% O2 in SIP

Rule 113.1 and 12% CO2 in District-only Rule 403. These limits are duplicative but were not

streamlined due to the low probability that PG&E might exceed either of those limits.

4. The storage tank vapor pressure limits of 1.2 psia and 1.5 psia for P-2501-O-7&8 and O-9

respectively are not streamlined with the 0.5 psia operational limit of condition I.B.6. Note

that the units for the 1.2 limit were incorrectly listed as 'psig' in the original permit. District

correspondence dated 12-13-76 corrected this to 'psia'. See attachment D for a copy of that

letter. No streamlining is proposed because the construction date of these tanks triggers the

applicability of New Source Performance Standard (NSPS) subpart K (see items VI.2.i and

VI.10 below). The 0.5 psia limit is intended to preclude the applicability of District Rule

425. Streamlining would mean use of the 0.5 psia limit because it is the most stringent of

any that apply. Streamlining is not proposed here so that the Rule 425 based limit remains a

District-only requirement.

V. Periodic Monitoring. If it is deemed necessary, the permit should include periodic

monitoring conditions, to ensure compliance with all applicable federal requirements (reference Rule 216.F.1.a). Most NSPS requirements already contain provisions for periodic monitoring and need no further discussion. This section of the evaluation will discuss requirements which do not contain explicit monitoring.

1. SIP Rule 401, Visible Emissions (condition III.A.1.a). This rule limits emissions to 40% opacity. If warranted, periodic monitoring could be accomplished through in-stack opacity monitors or visible emission evaluations by certified observers. PG&E's boilers are currently fueled by natural gas but all four are permitted to burn fuel oil. Any visible emissions that might occur from the natural gas would result from incomplete combustion. A combustion efficiency analysis of the 1996 compliance testing performed at the power plant can be found in attachment D. All units achieved at least 99% efficiency which is not unexpected because each boiler has been extensively tuned to achieve the lowest NOx emissions possible under District Rule 429, NOx and CO from Electric Power Generation Boilers. Consequently, no visible emissions are expected to occur when burning natural gas in these units.

Units 3 and 4 already have opacity monitors which were originally required under EPA's Acid Rain program. That requirement no longer applies but the monitors are maintained and still in use. The duct arrangement for Units 1 and 2 is rather complicated and makes individual monitoring of each unit's opacity difficult if not impossible. Opacity monitors have never been installed on these units, nor have they ever been required, because of this difficulty. Therefore, the opacity monitors on units 3&4 could be used to determine continuous compliance with SIP Rule 401, when burning either oil or gas fuel, but their installation on Units 1 and 2 is judged to be unwarranted at this time.

Consequently, the use of opacity monitors for Units 3 & 4 will be applied as a federally-enforceable requirement to show compliance with SIP Rule 401 but no additional monitoring of Units 1 and 2 is proposed.

2. SIP Rule 111, Nuisance (condition III.A.1.b). This rule prohibits the causing of a public nuisance. This rule stems from a similar regulation in the California Health and Safety Code and there is no corresponding federal requirement. While it currently appears in the SIP, it

doesn't belong there. Reference EPA's letter of August 18, 1994 (see attachment D), in

which one of the types of rules not to be included in the SIP are, "(5) any other purely

administrative or procedural regulation not related to the control of criteria pollutants." SIP

Rule 111 is intended to prevent nuisance situations which are more commonly caused by

odorous compounds. It is not intended to control criteria air contaminants. Therefore, this

rule will not be included as a federally enforceable requirement in this permit. Rather, its

present day counterpart in District Rule 402 will be included as a District-only requirement.

3. SIP Rule 113, Particulate Matter (condition III.A.1.c). This rule limits emissions to 0.3

gr/dscf and sliding scale amounts in lb/hr depending on process rate. If warranted, periodic

monitoring could be accomplished through stack sampling. PG&E's natural gas fired boilers

are not likely to exceed either the concentration or mass emission limits of this rule for the

same reason of their high combustion efficiency as noted above for SIP Rule 401. In

addition, the large physical size of the power plant's duct-work makes isokinetic sampling

(required for particulate matter testing) nearly impossible. One particulate test has been

performed at this plant during start-up on natural gas fuel. The results showed negligible

emissions. All other particulate matter sources are fugitive in nature and cannot be tested.

Consequently, no additional periodic monitoring is proposed.

4. SIP Rule 114.1, Sulfur Dioxide (condition III.A.1.d.1). This rule limits emissions to 0.2%

as sulfur dioxide. If warranted, periodic monitoring could be accomplished through in-stack

continuous emissions monitoring, continuous or periodic fuel sulfur content monitoring, or

stack sampling. Natural gas fuel has a limited amount of sulfur, which is included as an

odorant and can be emitted as sulfur dioxide in the stack gases. Fuel oil used at this facility

is limited to 0.5% sulfur by existing regulations. Mass balance calculations for both of these

fuels can be performed to show that neither could lead to an exceedance of the 2,000 ppm

limit of SIP Rule 114.1 when they are combusted. In addition, fuel oil sulfur will be

periodically monitored, if it is ever burned again, under the Acid Rain portions of this

permit. Consequently, no additional periodic monitoring is proposed.

5. SIP Rule 404.B, Sulfur Content of Fuels (condition III.A.1.d.2&3). This rule limits the

sulfur content of gaseous fuels to 50 gr/100 dscf and liquid fuels to 0.5%.
If warranted,
periodic monitoring could be accomplished through continuous or periodic fuel
sampling for
sulfur content. As mentioned above, the natural gas fuel does contain small
amounts of a
sulfur compound but this is closely regulated by the Public Utilities
Commission and is far
less concentrated than the 50 gr/100 dscf standard. Also as mentioned above,
fuel oil sulfur
content analysis is part of the Acid Rain program and that testing satisfies
any periodic
monitoring that could be required for this rule. Consequently, no additional
periodic
monitoring is proposed.

6. SIP Rule 406, Carbon Monoxide (condition III.A.1.e). This rule limits
emissions to 2,000
ppm. If warranted, periodic monitoring could be accomplished through in-
stack monitors or
stack testing. Each of the four main boilers employs a continuous emissions
monitoring
system (CEMS) that includes carbon monoxide (CO) but the upper range of those
instruments for CO is only 1,500 ppm. Therefore, those monitors cannot be
used to ensure
compliance with this rule's limit. Compliance testing is already performed
annually.
Consequently, the CO monitors will be considered a District-only requirement,
the annual
testing a federally-enforceable requirement, and no additional periodic
monitoring is
proposed.

The above discussions concern compliance with SIP requirements by the power
plant's four main
boilers. Two other smaller boilers are used to heat fuel oil at the off-site
fuel storage tank farm.
Their fuel supply is the large off-site storage displacement oil tank, which is
designed to hold #2
diesel fuel. There currently is no oil stored at that off-site facility and the
boilers have not
operated since 1996. Due to the lack of any foreseeable use of these units, the
fact that they burn
a relatively clean diesel fuel, and the fact that their small size makes in-
stack monitoring not cost
effective, no periodic monitoring is proposed for those units at this time.

7. SIP Rule 407.H, Metal Surface Coating Thinners and Reducers (condition
III.A.1.f). This
rule prohibits thinning with photochemically reactive solvents. If
warranted, periodic
monitoring could be accomplished either through recordkeeping of the coatings
and thinners
used and their material data safety sheets (MSDS) or laboratory testing of
each thinners
mixed with metal part coatings. Condition III.B.1.e to the permit will
require recordkeeping

sufficient to show that non-photochemically reactive thinners and reducers are used by both

PG&E and their contractors for metal surface coatings. Note that condition III.A.2.k, which

limits the applicability of the permit to the power plant properties, is intended to satisfy any

concerns that PG&E might be liable for coatings applied off-site by contractors.

8. SIP Rule 407.H.3, Architectural Coatings (condition III.A.1.g). This rule prohibits the use

of architectural coatings, sold in quart containers or larger, which contain photochemically

reactive solvents. It also does not allow the thinning or reducing of those coatings with

photochemically reactive solvents. If warranted, periodic monitoring would be same as

under item 7 above. Condition III.B.1.f to the permit will require recordkeeping sufficient to

show that non-photochemically reactive solvents, thinners, and reducers are used by both

PG&E and their contractors for architectural coatings.

9. SIP Rule 407.H.4, Disposal and Evaporation of Solvents (condition III.A.1.h). This rule

prohibits the evaporation of any more than 1« gallons of photochemically reactive solvent

during disposal. This type of emission might be characterized by allowing open paint cans

to dry out prior to disposal so that the can and its contents do not have to be treated as a

hazardous waste. If warranted, periodic monitoring could be accomplished through testing

of waste solvent content before and after disposal. PG&E should not allow any solvents to

evaporate during disposal, whether those solvents are photochemically reactive or not.

Condition III.A.1.h prohibits any evaporation of solvents during disposal. Analysis of waste

before and after disposal would be extremely expensive and is not warranted. Consequently,

no periodic monitoring is proposed.

10. SIP Rule 407.C.1.a, Submerged Fill Pipes (condition III.A.1.o). This rule prohibits the

filling of any 250 gallon or larger gasoline storage tank without the use of a submerged fill

pipe. If warranted, periodic monitoring could be accomplished by inspecting each gasoline

storage tank's fill pipe prior to filling it. All gasoline storage tanks at PG&E have been

inspected at one time or another and have had the presence of a submerged fill pipe verified.

Consequently, no periodic monitoring is proposed.

11. SIP Rule 424.B.5, Phase I Vapor Recovery (condition III.A.1.p). This rule requires the use

of good operating practices when transferring gasoline into a storage tank. If warranted, periodic monitoring could be accomplished through independent observation of each gasoline transfer. Contractor filling of gasoline storage tanks are already required to use good operating practices by PG&E's safety department. Consequently, no periodic monitoring is proposed.

12. SIP Rule 416, Degreasing Operations (condition III.A.1.q). This rule has certain equipment requirements and requires the use of good operating practices when using cold solvent degreasers. If warranted, periodic monitoring could be accomplished through independent observation of each degreasing operation. None of this equipment in use at the facility is significant enough to require a District permit and the equipment's use is already adequately monitored by PG&E's safety department. Consequently, no periodic monitoring is proposed.

13. SIP Rule 501.A, Open Burning (condition III.A.1.r). This rule prohibits the burning of outdoor open fires except for fire fighting training purposes. If warranted, periodic monitoring could be accomplished by independent observation of the facility as a whole. PG&E has consistently sought and obtained permission for fire fighting training burns and has never been known or found to have lit open outdoor fires for any other reason. Based on such a good track record of compliance, no periodic monitoring is proposed.

VI. Specific Evaluation Notes

1. Standard conditions for generally applicable requirements do not list those processes to which they apply as allowed by EPA's White Paper One, page 11, section 4, last sentence of paragraph 2.

2. Minor New Source Review (NSR). All existing permit conditions, which are based on previous authority to construct conditions, are considered applicable federal requirements because those preconstruction review actions resulted from SIP Rule 201, Permits. EPA's White Paper One provides guidance on which of those conditions should be carried forward into the Title V permit as federally-enforceable requirements and which may revert to District-only requirements. Specifically, in the fourth paragraph of section II.B.7 to the

White Paper, conditions based on the following should be included as federally-enforceable:

- federal NSR (not applicable to this District)
- New Source Performance Standards (NSPS)
- prohibitory rules approved into the SIP
- those accepted voluntarily by a source to avoid an otherwise applicable federal requirement (e.g., to stay under a Prevention of Significant Deterioration threshold)

Should an existing permit condition not meet any of these profiles, the District is granted the discretion under the White Paper to consider them District-only. The term "overriding federal requirement" will be used in this evaluation to describe the federally-enforceable programs listed above.

See attachment E for a copy of the current permits to operate and their historical authorities to construct. These were used to form up attachment C which lists all existing permit conditions. For those that are based on requirements placed through an authority to construct, the date of the authority to construct, the unit affected, and whether or not the Title V requirement will be considered federally-enforceable or not, and why, are also included. Finally, this table offers a cross reference to each corresponding Title V permit condition. In the way of explanation for how the federal-enforceability decisions were made:

- If an existing permit condition did not result from an authority to construct and is not based on an overriding federal requirement, it will not be federally-enforceable in the Title V permit.
- If an existing permit condition did not result from an authority to construct but is felt to either be based on an overriding federal requirement or supports a federally-enforceable requirement, it will be considered federally-enforceable. A reason for that decision will be noted in the far right hand column of the table.
- If an existing permit condition did result from an authority to construct but has no corresponding overriding federal requirement, it will not be federally-enforceable. A reason for that decision will be noted in the table.
- If an existing permit condition did result from an authority to construct and is based on

an overriding federal requirement, it will be considered federally-enforceable. No reason for that decision is either needed or offered.

a. The soil remediation limits in original permit P-2501-I-1 are determined to be District-only enforceable. There are no overriding applicable requirements which apply to this

source type. All maintenance, testing, recordkeeping, and reporting conditions become

District-only requirements because the emission limits are insignificant and District-only enforceable. The general requirements concerning operation in accordance with

application and notification of changes will also be considered District-only enforceable

because there are no overriding associated applicable federal requirements.

b. The permit P-2501-A-1, condition 6, general requirement to maintain equipment in

good working order and in such a manner as to minimize emissions is an applicable

federal requirement for main boiler units 3 and 4 because a similar condition was

included in authorities to construct issued on June 30, 1992, and July 7, 1995 for the

respective units. This requirement for those units will be considered District-only

enforceable because there is no overriding applicable federal requirement and the fact

that adequate compliance is assured under federally-enforceable Title V condition

III.A.2.a which requires compliance with terms and conditions of the permit.

c. The record keeping and abrasive recycling requirements for the abrasive blasting

facility, permit P-2501-F-1, are in support of state-only Title 17 requirements which are

not applicable federal requirements. Therefore, these conditions will be considered

District-only enforceable.

d. The enclosure of transfer points, filter maintenance, and 20% opacity limitations of the

abrasive blasting facility permit, F-1, support the applicable federal requirements of

<40% opacity and <0.3 gr/dscf. Therefore, they are retained as federally-enforceable

requirements.

e. The floating roof seal requirements of condition 1 to permits P-2501-O-7,8,&9 are

determined to be District-only enforceable because there is no overriding federally

applicable requirement.

f. The July 28, 1994, burner replacement A/C for units 3 & 4 included as a condition a reminder that the existing conditions of permit P-2501-A-3 remain in effect during and after burner replacement. This evaluation assumes that this condition did not mean that the P-2501-A-3 conditions were included as part of the A/C and, therefore, those conditions were not made federally enforceable by that A/C.

g. The permit P-2501-A-1, condition 2.c, administrative allowance that failure of the natural gas supply system may be considered a breakdown will be considered District-only enforceable both because it is administrative in nature and because there is no overriding applicable federal requirement.

h. The permit P-2501-A-1, condition 3.a, requirement to source test annually will be considered partially District-only enforceable and partially federally-enforceable. As mentioned earlier, annual testing is the only way to ensure compliance with the 2,000 ppm CO limit of SIP Rule 406. However, due to the Acid Rain requirement to monitor for NOx emissions, annual testing is not necessary for NOx. Consequently, the annual test will be considered District-only for NOx and federally-enforceable for CO. A summary of the NOx and CO limits, their basis, and their enforceability is as follows:

Title V
Cond.
Units
ppm limit
Pollu-tant
Basis
District-only
Fed-Enf

gas
oil

I.A.1
1&2
150

NOx
Rule 429
X

I.A.2
1&2

450
NOx
Rule 429
X

I.A.3
3&4
56

NOx
Rule 429
X

I.A.4
3&4

250
NOx
Rule 429 and A/C
condition

X (CEMS)

I.A.5
3&4
225

NOx
SIP Rule 405.A.1

X (CEMS)

I.A.6
3&4

300
NOx
SIP Rule 405.A.1

X (CEMS)

I.A.7
1,2,3&4
1,000
CO
Rule 429
X

I.A.8
1,2,3&4
2,000
CO
SIP Rule 406

X (source test)

i. The 1.2 psia vapor pressure limitation on the two offsite fuel oil storage tanks was placed to avoid having to perform an ambient air quality analysis under old District Rule 190.8, which was not an otherwise applicable federal requirement. Therefore, that limitation will be considered District-only. The 1.5 psia limitation on the offsite displacement oil tank was placed through a permit to operate action and is, therefore, a District-only requirement.

3. PG&E has indicated that all air conditioning work is done by others or is done offsite (Mark Hays, telecon on August 25, 1997). Title VI does not apply.

4. NOx concentration is corrected to 3% O2 by using calculations based on the CO2 signal from the CEM. There are no separate dilution monitors from the CO2 monitor (reference recordkeeping requirements in 40CFR75.56.a.1 for example).

5. For the purposes of SO2 emission calculations under 40CFR75, Appendix D, PG&E uses the default emission factor of 0.0006 lb/mmBtu. Automatic gas sampling occurs on a semi-continuous basis according to PG&E's Richard Flander, 415-973-0909, but the results aren't used for SO2 purposes. Consequently, the recordkeeping identified in 40CFR75.55.c.5&6 does not apply.

6. The 2,000 ppm limit is intentionally duplicated in conditions I.A.8 and III.A.1.e because the latter instance is a general requirement for all sources at the facility (e.g., off-site boilers) while the former limit is included to clearly indicated that the main boilers are subject to this limit and to contrast that limit with the District-only requirement of 1,000 ppm.

7. The off-site boiler use factor limit of 77% in condition I.B.2 is based on a NSR evaluation in

August of 1979. That permit to operate was issued on September 4, 1979. The use factor

limit precluded the need for an Air Quality Impact Analysis having to be performed for SO₂

under District Rule 190.8 (in force on the date of the A/C, November 24, 1976). The 77%

limit was not placed through an A/C and is, therefore, a District-only requirement.

8. PG&E uses a mass flow meter with regards to the requirement in 40CFR75.55.c.1.vii to

record fuel oil density if a volumetric meter is used when burning oil. Consequently, the

density determination requirement does not apply.

9. Permit Fees. PG&E will be invoiced at the prevailing District hourly rate for the time it

takes to issue this permit. PG&E has also previously paid permit renewal fees at various

times during this last 36 months. These fees will be applied on a prorated basis, as

determined in Attachment B to this evaluation, to the initial Title V fees due. A preliminary

invoice for prorated renewal fees and District evaluation costs through December 2, 1997,

has already been sent to PG&E at their request. A second invoice for evaluation costs will

be sent with the final permit to operate. The December invoice assumed that the effective

date of this permit was going to be January 1, 1998. As it has turned out, the effective date

will be March 31, 1998. Consequently, the second invoice will also contain a prorated

renewal fee adjustment to reflect that later effective date.

10. The three offsite storage tanks are subject to NSPS subpart K, Storage Vessels Constructed

After June 1, 1973, and Prior to May 19, 1978 (40CFR60.110). An authority to construct

for the tanks was issued on November 22, 1976, and construct was completed by May, 1978.

The two 500,000 bbl fuel oil tanks are limited to a vapor pressure of 1.2 psia or less and the

43,000 bbl displacement oil tank is limited to less than 1.5 psia. Under the NSPS, a floating

roof is required if the material store has a vapor pressure of 1.5 psia or more (reference

40CFR60.112.a.1). The tanks are not required to employ a floating roof because of their

vapor pressure limits, although each does indeed employ a floating roof. All three tanks are

exempt from the recordkeeping requirements of 40CFR60.113.a because the true vapor

pressure of the materials stored have never exceeded 1.0 psia (see 1995 emission inventory questionnaire response in attachment D).

11. A 1/8 inch gap requirement was added for the offsite storage tanks seals in keeping with the District's letter of December 13, 1976 (see attachment D).

12. Compliance with 40CFR general provisions.

General Provision
Condition

60.7.a
general reporting
III.E.7.d.1

60.7.b
start-up, shutdown, & maintenance
recording
III.E.7.d.2

60.7.f
recordkeeping and retention
III.B

60.12
circumvention not allowed
III.A.7

61.05.c
(NESHAPS) operate in compliance
III.A.1.p/q

61.05.d
submit reports
III.A.1.p/q.1

61.10.c
changes to initial notification
III.A.1.p/q.2

61.12.c
good operating practice
III.A.1.p/q.3

61.19
circumvention not allowed
III.A.7

72.9
standard Acid Rain requirements
section V and associated acid rain

application requirements

72.9.a.1.i

submit Acid Rain APL by 1-1-96
complete APL received on 12-4-95

72.9.c.3

SO2 allowance applicability date
1-1-2000, condition III.F.2

72.9.d

NOx requirements
do not apply to gas/oil fired units

75.4.a.4.ii

install CEMs by 1-1-96
installed and certified

75.4.g

install fuel flow meter
III.C.3

13. There was only one written public comment received during the public comment period (see attachment G). That individual simply stated that the power plant was a bother to them and that no permit (Acid Rain, Title V, or otherwise) should be issued for the source. While the person who commented raised the technical issue of nuisance fallout as being a reason for denial of the permit, this reason is judged not sufficient for the District to take such a drastic action because PG&E is currently in compliance with the District's nuisance rule. While the person who commented has every right to oppose the issuance of the permit, PG&E also has the legal right to be issued the permit, if they can show that they are in compliance with all applicable requirements. As indicated elsewhere in this evaluation, that compliance has been demonstrated so the District is obligated to issue this combined Acid Rain and Title V permit.

14. PG&E's comments of December 19 (reference their items H and I) echoed their earlier comments of November 25 and took issue with the District's requirement to report CEMS performance data and excess emissions on a per minute basis instead of a per hour basis.

District staff person Karen Brooks negotiated with EPA Region IX to obtain a compromise,

see the current version of condition III.B.5.b.1, between the District's earlier wording and

PG&E's suggested language. While this may not fully respond to PG&E's requests, it is felt

to be the best that the District can do in light of EPA's requirements.

VII. Conclusion and Recommendation. In conclusion, the proposed combined Title IV and

Title V permit has been found to satisfy all of the requirements of District Rule 216, Rule

217, Rule 202, and the District's Title IV and Title V permit programs. Therefore, it is

recommended that this permit be issued to satisfy those requirements.

David W. Dixon
Supervising Engineer

Attachments: A - Completeness Evaluations
B - Renewal Fee Proration Calculation
C - Existing Permit Condition to Title V Condition Cross Reference
D - Supporting Documentation
E - Current Permits to Operate and Corresponding Authorities to
Construct
F - Public Notice Text
G - Public Comments Received

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment A

Completeness Evaluations

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment B

Renewal Fee Proration Calculation

Renewal Fee Proration Calculation
(prorated assuming compliance determinations each April)

	PROCESS	
	Last Renewal Fee Paid	
	Next	
	Rnwl	
	Current	
	Fee	
	Prorated	
	Fee (a)	
	amt	
	mo/yr	
	period	
	mo/yr	
A-1		
main boilers		
		168,800
May 97		
12		
May 98		
		168,800
		\$154,733.33
C-1		
portable abr blst		
		200
May 96		
36		
May 99		
		200
		\$127.78
D-1		
off-site stm gen		
		2,600
Oct 97		
12		
Oct 98		
		2,600
		\$1,300.00
E-1		
off-site separator		
		1,680

Oct 97	
12	
Oct 98	
	1,680
	\$840.00

F-1	
abr blstg facility	
	200
Oct 97	
12	
Oct 98	
	200
	\$100.00

I-1	
soil remediation	
	340
Apr 97	
12	
Apr 98	
	340
	\$340.00

O-6	
on-site displ oil	
	880
Oct 97	
12	
Oct 98	
	880
	\$440.00

O-7	
off-site fuel oil	
	880
Oct 97	
12	
Oct 98	
	880
	\$440.00

O-8	
off-site fuel oil	
	880
Oct 97	
12	
Oct 98	
	880
	\$440.00

O-9
off-site displ oil

880

Oct 97
12
Oct 98

880
\$440.00

P-1
on-site fuel oil

3,000

Oct 97
12
Oct 98

3,000
\$1,500.00

Subtotal prorated fees =
\$160,701.11

Preliminary invoice #5792 already paid =
(\$115,649.44)

Total prorated initial fees due upon Title V P/O issuance =
\$45,051.67

(a) Prorated fee = current fee - {last amt paid * [(next rnwl mo/yr - compl.
deter. mo)
/ (rnwl period]}

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment C

Existing Permit Condition
to Title V Condition
Cross Reference

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment D

Supporting Documentation

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment

E

Current Permits to Operate and
Corresponding Authorities to Construct

List of Permits to Operate and Corresponding Authorities to Construct

A/C
Date
Subject
Current P/O
P/O When
A/C Issued

11/20/73
addition of internal floating roofs
to existing cone roof fuel oil tanks
P-2501-P-1

7/29/74
new on-site displacement oil tank
P-2501-O-6

11/22/76
new off-site oil/water separator
P-2501-E-1

11/22/76
new off-site storage tanks
P-2501-O-7, fuel oil
P-2501-O-8, fuel oil
P-2501-O-9, displacement oil

11/24/76
off-site boilers
P-2501-D-1

10/14/86
abrasive blasting facility
P-2501-F-1

12/4/86
installation of fuel additive system
for units 3&4
P-2501-A-3 & 4

6/30/92
CEMs on all units, flue gas recirc
& fire air ports on units 3&4
P-2501-A-1
P-2501-A-1, 2, 3, & 4

7/28/94
S-burner replacement on unit 3
P-2501-A-1
P-2501-A-3

7/7/95
S-burner replacement on unit 4
P-2501-A-1
P-2501-A-4

2/14/96
new soil remediation system
P-2501-I-1

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment

F

Public Notice Text

PG&E Morro Bay Power Plant, Applications 2055 and 2103

Attachment

G

Public Comments Received